

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/773,054	
				Filing Date	February 4, 2004	
				First Named Inventor:	Hossein Sedarat	
				Art Unit	2611	
Examiner Name	Zheng, Eva Y.					
Sheet	1	of	3	Attorney Docket Number	6491.P076	
U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
		US-	4,679,227	7/7/1987	Hughes-Hartogs, Dirk	
		US-	6,006,083	12/21/1999	Tong et al.	
		US-	6,859,488 B2	2/22/2005	Azenkot et al.	
		US-	2004/0066865 A1	4/8/2004	Yousef et al.	
		US-	2005/0169357 A1	8/4/2005	Sedarat, Hossein	
		US-	2005/0190825 A1	9/1/2005	Sedarat, Hossein	
		US-	2006/0062379 A1	3/23/2006	Sedarat et al.	
		US-	2006/0067388 A1	3/30/2006	Sedarat, Hossein	
		US-	2006/0083321 A1	4/20/2006	Sedarat, Hossein	
		US-	2006/0222098 A1	10/5/2006	Sedarat et al.	
		US-	2006/0253515 A1	11/9/2006	Sedarat, Hossein	
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FOREIGN PATENT DOCUMENTS								
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

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NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
		SEDARAT, HOSSEIN, et al., "Impulse Noise Protection for Multi-Carrier Communication Systems", Submitted to IEEE ICASSP (2005).			
		SEDARAT, HOSSEIN, et al., "Multicarrier Bit-Loading in Presence of Biased Gaussian Noise Source", IEEE Consumer Communication and Networking Conference, January 2005.			
		FISCHER, ROBERT F.H., et al., "A New Loading Algorithm for Discrete Multitone Transmission," IEEE, 1996, pp. 724-728.			
		LAMPE, LUTZ H.-J., et al., "Performance Evaluation of Non-Coherent Transmission over Power Lines," 8 pgs.			
		HENKEL, WERNER, ET AL., "Maximizing the Channel Capacity of Multicarrier Transmission by Suitable Adaptation of the Time-Domain Equalizer," IEEE, Vol. 48, no. 12, December 2000.			
		LASHKARIAN, NAVID, et al., "Fast Algorithm for Finite-Length MMSE Equalizers with Application to Discrete Multitone Systems," IEEE 1999, pp. 2753-3756.			
		MELSA, PETER J.W., et al., "Impulse Response Shortening for Discrete Multitone Transceivers," IEEE Vol. 44, no. 12, December 1996, pp. 1662-1672.			
		AL-DHAHIR, NAOFAL, ET AL., "Optimum Finite-Length Equalization for Multicarrier Transceivers," IEEE Vol. 44, No. 1, January 1996, pp. 56-64.			
		LEKE, ACHANKENG, et al., "A Maximum Rate Loading Algorithm for Discrete Multitone Modulation Systems," IEEE 1997, pp. 1514-1518.			
		BINGHAM, JOHN A.C., "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come," IEEE, May 1990, pp. 5-14.			
		ARSLAN, G., et al., "Equalization for Discrete Multitone Transceivers to Maximize Bit Rate," IEEE, Vol. 49, No. 12, December 2001, pp. 3123-3135			

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NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
		FARHANG-BOROUJENY, BEHROUZ, et al., "Design Methods for Time-Domain Equalizers in DMT Transceivers," IEEE, Vol. 49, No. 3, March 2001, pp. 554-562.			
		WYGLINSKI, ALEXANDER M., et al., "An Efficient Bit Allocation for Multicarrier Modulation," IEEE Wireless Communication, Networking Conference, Atlanta, GA, March 2004, 6 pgs.			
		"Draft Standard," Network and Customer Installation Interfaces- Asymmetric Digital Subscriber Line (ADSL) Metallic Interface, Draft American National Standard for Telecommunication, Alliance for Telecommunications Industry Solutions, T1.413-1998.			
		MILOSEVIC ET AL., "Simultaneous Multichannel Time Domain Equalizer Design Based on the Maximum Composite Shortening SNR", Dept. of Electrical and Computer Eng., The University of Texas, Austin, Texas, Prior to filing date of current application, pp. 5 total.			
		FUKUDA , MISAO et al., "A Line Terminating LSI Using Echo Cancelling Method for ISDN Subscriber Loop Transmission", IEEE Journal on Selected Areas in Communications, Vol. 6, No. 3, April 1988, pp. 476-483.			
		WU , CHENG-SHING et al., "A Novel Cost-Effective Multi-Path Adaptive Interpolated FIR (IFIR)-Based Echo Canceller", © 2000 IEEE, pp. V-453-V-456.			
		SONALKAR, RANJAN V. et al., "Shannon Capacity of Frequency-Overlapped Digital Subscriber Loop Channels", © 2002 IEEE, pp. 1741-1745.			
		PEREZ-ALVAREZ , IVAN A. et al., "A Differential Error Reference Adaptive Echo Canceller for Multilevel PAM Line Codes**" *Work supported by National Project T1C95-0026, © 1996, IEEE, pp. 1707-1710			
		AHMED , NADEEM et al., "Optimal Transmit Spectra for Communication in the Presence of Crosstalk and Imperfect Echo Cancellation", Copyright 2001 IEEE, pp. 17-21.			
		FRANKLIN, CURT, "How DSL Works", How Stuff Works, http://computer.howstuffworks.com/dsl..htm/printable , printed November 16, 2004, pp. 1-6.			

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